

## Glossary

USFWS



*Mason Neck Refuge*

## **Glossary (including list of acronyms and abbreviations)**

## Glossary

<b>abiotic</b>	relating to the non-living chemical and physical factors of the environment (e.g., temperature, water, soil, atmosphere, etc.)
<b>accessibility</b>	the state or quality of being easily approached or entered, particularly as it relates to complying with the Americans with Disabilities Act (ADA)
<b>accessible facilities</b>	structures accessible for most people with disabilities without assistance; facilities that meet Uniform Federal Accessibility Standards (UFAS) ; Americans with Disability Act (ADA)-accessible; e.g., parking lots, trails, pathways, ramps, picnic and camping areas, restrooms, boating facilities (docks, piers, gangways), fishing facilities, playgrounds, amphitheaters, exhibits, audiovisual programs, and wayside sites
<b>accreting</b>	to grow or to increase gradually
<b>adaptation</b>	adjustment to environmental conditions
<b>adaptive management</b>	<p>Focuses on learning and adapting, through partnerships of managers, scientists, and other stakeholders who learn together how to create and maintain sustainable ecosystems.</p> <p>Adaptive management helps science managers maintain flexibility in their decisions, knowing that uncertainties exist and provides managers the latitude to change direction will improve understanding of ecological systems to achieve management objectives is about taking action to improve progress towards desired outcomes.</p> <p>(Source: Williams, B. K., R. C. Szaro, and C. D. Shapiro. 2007. <i>Adaptive Management: The U.S. Department of the Interior Technical Guide</i>. Adaptive Management Working Group, U.S. Department of the Interior, Washington, DC.)</p>
<b>advanced regeneration</b>	tree seedlings or small saplings that develop in the understory prior to the removal of the stand's overstory. See "canopy."
<b>anaerobic</b>	process occurring without oxygen
<b>anuran</b>	of or relating to frogs and toads
<b>appropriate use</b>	a proposed or existing use on a refuge that meets at least one of the following three conditions: (1) the use is a wildlife-dependent one; (2) the use contributes to fulfilling the refuge purpose(s), the System mission, or goals or objectives described in a refuge management plan approved after October 9, 1997, the date the National Wildlife Refuge System Improvement Act was signed into law; or (3) the use has been determined appropriate as specified in section 1.11 of that Act.
<b>anadromous fish</b>	fish that spend a large portion of their life cycle in the ocean and return to freshwater to breed
<b>aquatic</b>	growing in, living in, or dependent upon water
<b>avian</b>	of or relating to birds

<b>avifauna</b>	all birds of a given region
<b>barrier</b>	any obstruction to fish passage; an aquatic barrier
<b>basin</b>	the land surrounding and draining into a water body; see “watershed”
<b>biological diversity or biodiversity</b>	the variety of life, including the variety of living organisms, the genetic differences among them, and the communities in which they occur
<b>biological integrity</b>	biotic composition, structure, and functioning at genetic, organism, and community levels comparable with historic conditions, including the natural biological processes that shape genomes, organisms and communities. See “biotic”
<b>biodiversity conservation</b>	the goal of conservation biology, which is to retain indefinitely as much of the earth’s biodiversity as possible, with emphasis on biotic elements most vulnerable to human impacts
<b>biota</b>	the plant and animal life of a region
<b>biotic</b>	relating to the living components of the environment (e.g., plants, animals, fungi, bacteria)
<b>breakwater</b>	a barrier protecting a harbor or shore from the impact of waves
<b>breeding habitat</b>	habitat used by migratory birds or other animals during the breeding season
<b>buffer zones</b>	land bordering and protecting critical habitats or water bodies by reducing human disturbance on animals, plants, and their habitats
<b>candidate species</b>	<p>plants and animals for which the U.S. Fish and Wildlife Service (FWS) has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities</p> <p>(Source: <a href="http://www.fws.gov/endangered/factsheets/candidate_species.pdf">http://www.fws.gov/endangered/factsheets/candidate_species.pdf</a>)</p>
<b>canopy</b>	the layer of foliage formed by the crowns of trees in a stand. For stands with trees of different heights, foresters often distinguish among the upper, middle and lower canopy layers. These represent foliage on tall, medium, and short trees. The uppermost layers are called the overstory.
<b>carbon footprint</b>	the amount of carbon dioxide (CO <sub>2</sub> ) emitted from the consumption of fossil fuels by a particular person, group, organization, agency, etc.
<b>census-designated place</b>	is a type of place (a concentration of population) identified by the United States Census Bureau for statistical purposes
<b>community type</b>	a particular assemblage of plants and animals

<b>compatible use</b>	“a wildlife-dependent recreational use or any other use of a refuge that, in the sound professional judgment of the Director, will not materially interfere with or detract from the fulfillment of the mission of the System or the purposes of the refuge.”—National Wildlife Refuge System Improvement Act of 1997 [Public Law 105-57; 111 Stat. 1253]
<b>compatibility determination</b>	a required determination for wildlife-dependent recreational uses or any other public uses of a refuge
<b>Comprehensive Conservation Plan</b>	mandated by the 1997 Refuge Improvement Act, a document that provides a description of the desired future conditions and long-range guidance for the project leader to accomplish purposes of the refuge system and the refuge. CCPs establish management direction to achieve refuge purposes. [P.L. 105-57; FWS Manual 602 FW 1.4]
<b>concern</b>	see “issue”
<b>conifer</b>	a tree or shrub in the phylum Gymnospermae; a tree or shrub that bears cones and has evergreen needlelike or scalelike leaves. Examples include pines and firs (family Pinaceae).
<b>conservation</b>	managing natural resources to prevent loss or waste; management actions may include preservation, restoration, and enhancement
<b>conservation corridor</b>	connections between suitable habitat that allow passage of plant or animal species
<b>conservation easement</b>	a non-possessory interest in real property owned by another imposing limitations or affirmative obligations with the purpose of returning or protecting the property’s conservation values.
<b>conservation status</b>	assessment of the status of ecological processes and of the viability of species or populations in an ecoregion.
<b>cooperative agreement</b>	a usually long-term habitat protection action, which can be modified by either party, in which no property rights are acquired. Lands under a cooperative agreement do not necessarily become part of the National Wildlife Refuge System
<b>cultural resource inventory</b>	<p>a professional study to locate and evaluate evidence of cultural resources within a defined geographic area</p> <p>[N.b. Various levels of inventories may include background literature searches, comprehensive field examinations to identify all exposed physical manifestations of cultural resources, or sample inventories for projecting site distribution and density over a larger area. Evaluating identified cultural resources to determine their eligibility for the National Register follows the criteria in 36 CFR 60.4 (cf. FWS Manual 614 FW 1.7).]</p>
<b>cultural resource overview</b>	<p>a comprehensive document prepared for a field office that discusses, among other things, project prehistory and cultural history, the nature and extent of known cultural resources, previous research, management objectives, resource management conflicts or issues, and a general statement of how program objectives should be met and conflicts resolved</p> <p>[An overview should reference or incorporate information from a field offices background or literature search described in section VIII of the Cultural Resource Management Handbook (FWS Manual 614 FW 1.7).]</p>

<b>database</b>	a collection of data arranged for ease and speed of analysis and retrieval
<b>dbh</b>	diameter at breast height; the diameter of the stem of tree measured at breast height (usually 4.5 feet above the ground); commonly used by foresters to describe tree size.
<b>defoliator</b>	an agent (e.g., insect pest, herbicide) that damages trees by destroying leaves or needles
<b>degradation</b>	the loss of native species and processes due to human activities such that only certain components of the original biodiversity persist, often including significantly altered natural communities
<b>desired future condition</b>	the future qualities of the refuge that the Service hopes to develop through management actions and decisions (i.e. What will the refuge look like in the future?)
<b>disturbance</b>	any relatively discrete event in time that disrupts ecosystem, community, or population structure and changes resources, habitat availability, or the physical environment
<b>donation</b>	a citizen or group may wish to give land or interests in land to the Service for the benefit of wildlife. Gifts and donations have the same planning requirements as purchases.
<b>easement</b>	a non-possessory interest in real property that permits the holder to use another's land for a specified purpose. It may also impose limitations or affirmative obligations on the holder of the land subject to the easement. An agreement by which landowners give up or sell one of the rights on their property (e.g., landowners may donate rights-of-way across their properties to allow community members access to a river. See "conservation easement.")
<b>ecological integrity</b>	The integration of biological integrity, natural biological diversity, and environmental health; the replication of natural conditions. For communities, integrity is governed by demographics of component species, intactness of landscape-level ecological processes (e.g., natural fire regime), and intactness of internal community processes (e.g., pollination).
<b>ecoregion</b>	a territory defined by a combination of biological, social, and geographic criteria, rather than geopolitical considerations. Generally, a system of related, interconnected ecosystems.
<b>ecosystem</b>	a natural community of organisms interacting with its physical environment, regarded as a unit
<b>ecosystem service</b>	a benefit or service provided free by an ecosystem or by the environment, such as clean water, flood mitigation, or groundwater recharge
<b>embayment</b>	a bay or baylike formation
<b>emergent wetland</b>	wetlands dominated by erect, rooted, herbaceous plants

<b>endangered species</b>	a federally listed or State-listed protected species in danger of extinction throughout all or a significant portion of its range
<b>environment</b>	the sum total of all biological, chemical and physical factors to which organisms are exposed
<b>environmental education</b>	curriculum-based education aimed at producing a citizenry that is knowledgeable about the biophysical environment and its associated problems, aware of how to help solve those problems, and motivated to work toward solving them
<b>environmental health</b>	the composition, structure, and functioning of soil, water, air, and other abiotic features comparable with historic conditions, including the natural abiotic processes that shape the environment. See “abiotic.”
<b>Environmental Assessment</b>	(EA) a public document that discusses the purpose and need for an action, its alternatives, and provides sufficient evidence and analysis of its impacts to determine whether to prepare an environmental impact statement or a finding of no significant impact (q.v.) [cf. 40 CFR 1508.9]
<b>Environmental Impact Statement</b>	(EIS) a detailed, written analysis of the environmental impacts of a proposed action, adverse effects of the project that cannot be avoided, alternative courses of action, short-term uses of the environment versus the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitment of resources [cf. 40 CFR 1508.11]
<b>evaluation</b>	examination of how an organization’s plans and actions have turned out — and adjusting them for the future.
<b>exacerbate</b>	to make more severe or harsh
<b>extinction</b>	the termination of any lineage of organisms, from subspecies to species and higher taxonomic categories from genera to phyla. Extinction can be local, in which one or more populations of a species or other unit vanish but others survive elsewhere, or total (global), in which all the populations vanish (Wilson 1992)
<b>extirpated</b>	status of a species or population that has completely vanished from a given area but that continues to exist in some other location
<b>exotic species</b>	a species that is not native to an area and has been introduced intentionally or unintentionally by humans; not all exotics become successfully established. See “invasive species.”
<b>fauna</b>	all animal life associated with a given habitat, country, area or period
<b>Federal land</b>	public land owned by the Federal Government, including national forests, national parks, and national wildlife refuges



<b>Federal trust resource</b>	a resource that the Federal Government holds in trust for the people through law or administrative act. A Federal trust resource is one for which responsibility is given wholly or in part to the Federal Government by law or administrative act. Generally, Federal trust resources are nationally or internationally important no matter where they occur, like endangered species or migratory birds and fish that regularly move across state lines. They also include cultural resources protected by Federal historic preservation laws, and nationally important or threatened habitats, notably wetlands, navigable waters, and public lands like state parks and national wildlife refuges.
<b>Federal trust responsibility</b>	In the Federal government, a special duty required of agencies to hold and manage lands, resources, and funds on behalf of Native American Tribes.
<b>federally listed species</b>	a species listed either as endangered, threatened, or a species at risk under the Endangered Species Act of 1973, as amended
<b>fee-title acquisition</b>	the acquisition of most or all of the rights to a tract of land; a total transfer of property rights with the formal conveyance of a title. While a fee-title acquisition involves most rights to a property, certain rights may be reserved or not purchased, including water rights, mineral rights, or use reservation (e.g., the ability to continue using the land for a specified time period, such as the remainder of the owner's life).
<b>Finding of No Significant Impact</b>	(FONSI) supported by an environmental assessment, a document that briefly presents why a Federal action will have no significant effect on the human environment, and for which an environmental impact statement, therefore, will not be prepared [40 CFR 1508.13]
<b>fire management</b>	All activities related to the management of wildfires
<b>fish passage</b>	providing a safe passage for fish around a barrier in the upstream or downstream direction
<b>flora</b>	all the plants found in a particular place
<b>floodplain</b>	flat or nearly flat land that may be submerged by floodwaters; a plain built up or in the process of being built up by stream deposition
<b>flyway</b>	any one of several established migration routes of birds
<b>focal species</b>	a species that is indicative of particular conditions in a system (ranging from natural to degraded) and used as a surrogate measure for other species of particular conditions. An element of biodiversity selected as a focus for conservation planning or action.
<b>focus areas</b>	see "special focus areas"
<b>fragmentation</b>	the disruption of extensive habitats into isolated and small patches. Fragmentation has two negative components for biota: the loss of total habitat area, and the creation of smaller, more isolated patches of habitat.

<b>geographic information system</b>	(GIS) a computerized system to compile, store, analyze, and display geographically referenced information. (e.g., GIS can overlay multiple sets of information on the distribution of a variety of biological and physical features).
<b>geotextile fabric</b>	a strong material made of synthetic fibers used to reinforce soil and stabilize trails and roads
<b>habitat fragmentation</b>	the breaking up of a specific habitat into smaller, unconnected areas. A habitat area that is too small may not provide enough space to maintain a breeding population of the species in question.
<b>habitat conservation</b>	protecting a habitat to ensure that the use of that habitat wildlife and plants is not changed or reduced
<b>habitat</b>	is a combination of environmental factors that provides food, water, cover and space that a living thing needs to survive and reproduce.
<b>head-of-tide</b>	the farthest point upstream where a river is affected by tidal fluctuations
<b>herpetofauna</b>	the species of reptiles and amphibians in a particular area
<b>historic conditions</b>	the composition, structure and functioning of ecosystems resulting from natural processes that we believe, based on sound professional judgement, were present prior to substantial human-related changes to the landscape
<b>hydrologic or flow regime</b>	characteristic fluctuations in river flows
<b>hydrology</b>	the science of waters of the earth, their occurrences, distributions, and circulations; their physical and chemical properties; and their reactions with the environment.
<b>impoundment</b>	a body of water, such as a pond, confined by a dam, dike, floodgate, or other barrier, which is used to collect and store water for future use
<b>indigenous</b>	native to an area; a species that historically occurred or currently occurs in a particular ecosystem
<b>interjurisdictional fish</b>	populations of fish that are managed by two or more states or national or tribal governments because of the scope of their geographic distributions or migrations
<b>interpretive facilities</b>	structures that provide information about an event, place, or thing by a variety of means, including printed, audiovisual, or multimedia materials (e.g., kiosks that offer printed materials and audiovisuals, signs, and trail heads).
<b>interpretive materials</b>	any tool used to provide or clarify information, explain events or things, or increase awareness and understanding of the events or things (e.g., printed materials like brochures, maps or curriculum materials; audio/visual materials like video and audio tapes, films, or slides; and, interactive multimedia materials, CD ROM or other computer technology).
<b>introduced invasive species</b>	non native species that have been introduced into an area and, because of their aggressive growth and lack of natural predators, displace native species



<b>invasive species</b>	an alien species whose introduction causes or is likely to cause economic or environmental harm or harm to human health
<b>invertebrate</b>	any animal lacking a backbone or bony segment that encloses the central nerve cord
<b>issue</b>	<p>any unsettled matter that requires a management decision (e.g., a Service initiative, an opportunity, a management problem, a threat to the resources of the unit, a conflict in uses, a public concern, or the presence of an undesirable resource condition.)</p> <p>[N.b. A CCP should document, describe, and analyze issues even if they cannot be resolved during the planning process (FWS Manual 602 FW 1.4).]</p>
<b>landscape</b>	A heterogeneous land area composed of a cluster of interacting ecosystems that are repeated in similar form throughout.
<b>late-successional</b>	species, assemblages, structures, and processes associated with mature natural communities that have not experienced significant disturbance for a long time
<b>leachate</b>	a solution resulting from the downward movement of percolating groundwater
<b>limiting factor</b>	an environmental limitation that prevents further population growth
<b>living shorelines</b>	living shorelines are restored shorelines that use nature-based techniques such as marsh plantings, beach nourishment, and low profile oyster reefs, breakwaters, and sills. In addition to protecting property from erosion, living shorelines provide habitat for fish, birds, and other wildlife. Like undisturbed natural shorelines, they also protect water quality by trapping excess nutrients and sediment.
<b>local agencies</b>	generally municipal governments, regional planning commissions, or conservation groups
<b>longterm protection</b>	mechanisms like fee-title acquisition, conservation easements, or binding agreements with landowners that ensure land use and land management practices will remain compatible with maintaining species populations over the long term. See “fee-title acquisition.”
<b>macroinvertebrates</b>	invertebrates large enough to be seen with the naked eye (e.g., most aquatic insects, snails, and amphipods)
<b>management alternative</b>	a set of objectives and the strategies needed to accomplish each objective [FWS Manual 602 FW 1.4]
<b>management concern</b>	see “issue”
<b>management opportunity</b>	see “issue”

<b>management plan</b>	<p>a plan that guides future land management practices on a tract</p> <p>[N.b. In the context of an environmental impact statement, management plans may be designed to produce additional wildlife habitat along with primary products like timber or agricultural crops (see “cooperative agreement”).]</p>
<b>management strategy</b>	<p>a general approach to meeting unit objectives</p> <p>[N.b. A strategy may be broad, or it may be detailed enough to guide implementation through specific actions, tasks, and projects (FWS Manual 602 FW 1.4).]</p>
<b>marsh, marshlands</b>	<p>areas interspersed with open water, emergent and terrestrial vegetation</p>
<b>mission statement</b>	<p>a succinct statement of the purpose for which the refuge was established; its reason for being</p>
<b>mitigation</b>	<p>actions to compensate for the negative effects of a particular project (e.g., wetland mitigation usually restores or enhances a previously damaged wetland or creates a new wetland)</p>
<b>mosaic</b>	<p>an interconnected patchwork of distinct vegetation types.</p>
<b>National Environmental Policy Act of 1969</b>	<p>(NEPA) requires all Federal agencies to examine the environmental impacts of their actions, incorporate environmental information, and use public participation in planning and implementing environmental actions</p> <p>[Federal agencies must integrate NEPA with other planning requirements, and prepare appropriate NEPA documents to facilitate better environmental decision-making (cf. 40 CFR 1500).]</p>
<b>National Wildlife Refuge System</b>	<p>(Refuge System) all lands and waters and interests therein administered by the U.S. Fish and Wildlife Service as wildlife refuges, wildlife ranges, wildlife management areas, waterfowl production areas, and other areas managed to preserve a national network for the conservation and management of fish, wildlife, and plant resources of the United States, for the benefit of present and future generations (National Wildlife Refuge System Improvement Act, 16 U.S.C. § 668dd).</p>
<b>native</b>	<p>a species that historically occurred or currently occurs in a particular ecosystem</p>
<b>native plant</b>	<p>a plant that has grown in the region since the last glaciations and occurred before European settlement</p>
<b>natural processes</b>	<p>a complex mix of interactions among animals, plants, and their environment that ensures maintenance of an ecosystem’s full range of biodiversity. Examples include population and predator-prey dynamics, pollination and seed dispersal, nutrient cycling, and migration.</p>
<b>neotropical migrant</b>	<p>birds, bats, or invertebrates that seasonally migrate between the Nearctic region (North America as far south as northern Mexico) and the Neotropical region (South America as far north as northern Mexico)</p>

<b>non-consumptive, wildlife-oriented recreation</b>	wildlife observation and photography and environmental education and interpretation (see “wildlife-oriented recreation”)
<b>non-native species</b>	see “exotic species” or “invasive species”
<b>nonforested wetlands</b>	wetlands dominated by shrubs or emergent vegetation
<b>Notice of Intent</b>	(NOI) an announcement we publish in the <i>Federal Register</i> that we will prepare and review an environmental impact statement [40 CFR 1508.22]
<b>objective</b>	a concise statement of what a refuge wants to achieve, how much a refuge wants to achieve, when and where the refuge wants to achieve it, and who is responsible for the work. Objectives derive from refuge goals and provide the basis for determining strategies, monitoring refuge accomplishments, and evaluating the success of strategies.
<b>oligohaline</b>	Low salinity; having a salinity of 0.5 to 5 parts per thousand
<b>other-than-sight materials</b>	Interpretive materials accessible by the visually impaired refuge visitor
<b>palustrine forested wetlands</b>	wetlands dominated by trees, include wooded swamps and low-lying hardwood forests near rivers.
<b>palustrine wetlands</b>	palustrine wetlands includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all tidal wetlands where salinity due to ocean-derived salts is below 0.5 parts per thousand
<b>partnership</b>	any time that a federal or non-federal individual or entity work together with the U.S. Fish and Wildlife Service to achieve a mutual goal
<b>phenology</b>	the study of cyclical and seasonal natural phenomena, especially in relationship to climate and plant and animal life cycle events
<b>physiographic</b>	relating to physical geography
<b>PM<sub>2.5</sub>; PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b> particles are air pollutants with a diameter of 2.5 micrometers or less, small enough to invade even the smallest airways; <b>PM<sub>10</sub></b> - Particles 10 micrometers or less in size (smaller than the diameter of a human hair).
<b>population</b>	an interbreeding group of plants or animals. The entire group of organisms of one species.
<b>population monitoring</b>	assessing the characteristics of populations to ascertain their status and establish trends on their abundance, condition, distribution, or other characteristics
<b>prescribed fire</b>	the application of fire to wildland fuels, either by natural or intentional ignition, to achieve identified land use objectives [FWS Manual 621 FW 1.7] Also referred to as prescribed burn and controlled burn.
<b>priority public use</b>	a compatible wildlife-dependent recreational use of a refuge involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation

<b>private land</b>	land owned by a private individual or group or non-government organization
<b>private organization</b>	any non-government organization
<b>promotory</b>	a high point of land or rock projecting into a body of water; a prominent mass of land overlooking or projecting into a lowland
<b>proposed wilderness</b>	an area of the Refuge System that the Secretary of the Interior has recommended to the President for inclusion in the National Wilderness Preservation System
<b>public</b>	individuals, organizations, and non-government groups; officials of Federal, state, and local government agencies; Native American Tribes, and foreign nations—includes anyone outside the core planning team, those who may or may not have indicated an interest in the issues, and those who do or do not realize that our decisions may affect them
<b>public involvement</b>	offering an opportunity to interested individuals and organizations whom our actions or policies may affect to become informed; soliciting their opinions. We thoroughly study public input, and give it thoughtful consideration in shaping decisions about managing refuges.
<b>public land</b>	land owned by the local, state, or Federal government
<b>rare species</b>	species identified for special management emphasis because of their uncommon occurrence within a given region
<b>refuge goals</b>	descriptive, open-ended, and often broad statements of desired future conditions that convey a purpose but do not define measurable units. See “desired future conditions.”
<b>refuge purposes</b>	the purposes specified in or derived from the law, proclamation, executive order, agreement, public land order, donation document, or administrative memorandum establishing, authorizing, or expanding a refuge, refuge unit, or refuge subunit
<b>refuge lands</b>	lands in which the Service holds full interest in fee-title or partial interest, such as an easement
<b>restoration</b>	management of a disturbed or degraded habitat that results in the recovery of its original state (e.g., restoration may involve planting native grasses and forbs, removing shrubs, prescribed burning, or reestablishing habitat for native plants and animals on degraded grassland)
<b>riparian</b>	referring to habitat adjacent to rivers and streams
<b>riparian habitat</b>	habitat along the banks of a stream or river
<b>riverine</b>	within the active channel of a river or stream
<b>riverine wetlands</b>	all the wetlands and deepwater habitats occurring within a freshwater river channel not dominated by trees, shrubs, or persistent emergents

<b>runoff</b>	water from rain, melted snow, or agricultural or landscape irrigation that flows over a land surface into a water body (see “urban runoff”)
<b>scale</b>	the magnitude of a region or process. Refers to both spatial size—for example, a (relatively small-scale) patch or a (relatively large-scale) landscape; and a temporal rate—for example, (relatively rapid) ecological succession or (relatively slow) evolutionary speciation
<b>Service</b>	U.S. Fish and Wildlife Service
<b>Service presence</b>	public awareness of the Service; programs and facilities directed by the Service or that the Service shares with other organizations
<b>shrublands</b>	habitats dominated by various species of shrubs, often with many grasses and forbs
<b>siltation</b>	to fill, cover, or obstruct with silt or mud
<b>silviculture</b>	growing, cultivation, and management of trees and forests
<b>site improvement</b>	any activity that changes the condition of an existing site to better interpret events, places, or things related to a refuge (e.g., improving safety and access, replacing non-native with native plants, refurbishing footbridges and trailways, and renovating or expanding exhibits)
<b>small patch</b>	<p>communities that form small, discrete areas of vegetation cover. Individual occurrences of this community type typically range in size from 1 to 50 hectares. Small patch communities occur in very specific ecological settings, such as on specialized landform types or in unusual</p> <p>microhabitats. The specialized conditions of small patch communities, however, are often dependent on the maintenance of ecological processes in the surrounding matrix and large patch communities. In many ecoregions, small patch communities contain a disproportionately</p> <p>large percentage of the total flora, and also support a specific and restricted set of associated fauna (e.g., invertebrates or herpetofauna) dependent on specialized conditions.</p>
<b>species</b>	the basic category of biological classification intended to designate a single kind of animal or plant. Any variation among the individuals may be regarded as not affecting the essential sameness which distinguishes them from all other organisms.
<b>species of concern</b>	an informal term referring to a species that might be in need of conservation action. This may range from a need for periodic monitoring of populations and threats to the species and its habitat, to the necessity for listing as threatened or endangered under the Endangered Species Act. Such species receive no legal protection and use of the term does not necessarily imply that a species will eventually be proposed for listing (Source: <a href="http://www.fws.gov/endangered/glossary.html">http://www.fws.gov/endangered/glossary.html</a> ).
<b>stand</b>	an area of trees (or other vegetation) with a common set of conditions (e.g., based on age, density, species composition, or other features) that allow a single management treatment throughout

<b>state agencies</b>	natural resource agencies of state governments
<b>state land</b>	state-owned public land
<b>state-listed species</b>	a species listed as endangered, threatened, or a species of conservation concern by a state
<b>step-down management plan</b>	a plan for dealing with specific refuge management subjects, strategies, and schedules (e.g., Habitat Management Plan, Fire Management Plan, Inventorying and Monitoring Plan) [FWS Manual 602 FW 1.4]
<b>stopover habitat/sites/areas</b>	habitat where birds rest and feed during migration
<b>stormwater</b>	A term used to describe water runoff generated when precipitation from rain and snowmelt events flows over land or impervious surfaces
<b>strategy</b>	a specific action, tool, technique, or combination of actions, tools, and techniques for meeting refuge objectives
<b>strategic management</b>	the continual process of inventorying, choosing, implementing, and evaluating what an organization should be doing.
<b>structure</b>	the horizontal and vertical arrangement of trees and other vegetation having different sizes, resulting in different degrees of canopy layering, tree heights, and diameters within a stand.
<b>succession</b>	the natural, sequential change of species composition of a community in a given area
<b>surface water</b>	all waters whose surface is naturally exposed to the atmosphere, or wells or other collectors directly influenced by surface water
<b>terrestrial</b>	living on land
<b>territory</b>	an area over which an animal or group of animals establishes jurisdiction
<b>thinning</b>	reducing the density of trees in a stand primarily to improve the growth and condition of the remaining trees and prevent mortality.
<b>threatened species</b>	a federally listed, protected species that is likely to become an endangered species in all or a significant portion of its range
<b>tributary</b>	a stream or river that flows into a larger stream, river, or lake, feeding it water
<b>turbidity</b>	refers to the extent to which light penetrates a body of water
<b>understory</b>	the lower layer of vegetation in a stand, which may include short trees, shrubs, and herbaceous plants
<b>upland</b>	dry ground (i.e., other than wetlands)



<b>vernal pool</b>	<p>a type of seasonal wetland formed by isolated depressions in the landscape that hold water in the winter and spring and are usually dry by midsummer or fall. There are no permanent surface connections to flowing water. Water sources include rainfall, snowmelt and elevated water tables. Although fish are usually absent, vernal pools in riparian floodplains may contain fish periodically. Vernal pools are important breeding sites for amphibians. The woody debris and emergent grasses provide attachment sites for egg masses.</p> <p>Source: Mitchell, J.C., A.R. Breisch, and K.A. Buhlmann. 2006. <i>Habitat Management Guidelines for Amphibians and Reptiles of the Northeastern U.S. Partners in Amphibian and Reptile Conservation, Technical Publication HMG-3, Montgomery, Alabama, 108 pp</i></p>
<b>vision statement</b>	<p>a concise statement of what a refuge hopes to achieve over the next 15 years</p>
<b>watershed</b>	<p>the geographic area within which water drains into a particular river, stream, or body of water. A watershed includes both the land and the body of water into which the land drains.</p>
<b>wetlands</b>	<p>lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. These areas are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in saturated soil conditions.</p>
<b>wilderness area</b>	<p>an area designated by Congress as part of the National Wilderness Preservation System [FWS Manual 610 FW 1.5 (draft)]</p>
<b>wildfire</b>	<p>a free-burning fire requiring a suppression response; all fire other than prescribed fire that occurs on wildlands [FWS Manual 621 FW 1.7]. An unplanned ignition caused by lightning, volcanoes, unauthorized, and accidental human-caused actions and escaped prescribed fires.</p>
<b>wildland urban interface</b>	<p>The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.</p>
<b>wildlife-dependent recreational use</b>	<p>a use of a national wildlife refuge involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation (National Wildlife Refuge System Administration Act of 1966).</p>
<b>wildlife management</b>	<p>manipulating wildlife populations, either directly by regulating the numbers, ages, and sex ratios harvested, or indirectly by providing favorable habitat conditions and alleviating limiting factors</p>
<b>wildlife-oriented recreation</b>	<p>recreational activities in which wildlife is the focus of the experience</p> <p>[“The terms ‘wildlife-dependent recreation’ and ‘wildlife-dependent recreational use’ mean a use of a refuge involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation.”—National Wildlife Refuge System Improvement Act of 1997]</p>

## Acronyms and Abbreviations

<b>AASHTO</b>	American Association of State Highway and Transportation Officials
<b>ACJV</b>	Atlantic Coast Joint Venture
<b>ADA</b>	Americans with Disabilities Act
<b>AHWP</b>	Annual Habitat Work Plan
<b>AP</b>	Atlantic Population
<b>APHIS</b>	Animal and Plant Health Inspection Service
<b>AQI</b>	Air Quality Index
<b>ARPA</b>	Archaeological Resources Protection Act
<b>ASMFC</b>	Atlantic States Marine Fisheries Commission
<b>ASNV</b>	Audubon Society of Northern Virginia
<b>BCC</b>	Birds of Conservation Concern
<b>BCR</b>	Bird Conservation Region
<b>BLM</b>	Bureau of Land Management
<b>CARE</b>	Cooperative Alliance for Refuge Enhancement
<b>CCB</b>	Center for Conservation Biology
<b>CCP</b>	Comprehensive Conservation Plan
<b>CDP</b>	Census-designated Place
<b>CEQ</b>	Council on Environmental Quality
<b>CFR</b>	Code of Federal Regulations
<b>COMAR</b>	Code of Maryland Regulations
<b>CWD</b>	Chronic Wasting Disease
<b>DBH</b>	Diameter at Breast Height
<b>EA</b>	Environmental Assessment
<b>EDU</b>	Ecological Drainage Unit
<b>EIS</b>	Environmental Impact Statement
<b>EP</b>	Eastern Population
<b>EPA</b>	Environmental Protection Agency
<b>ESA</b>	Endangered Species Act
<b>FIDS</b>	Forest Interior Dwelling Species
<b>FHWA</b>	Federal Highway Administration
<b>FMP</b>	Fire Management Plan

## *Acronyms and Abbreviations*

<b>FOPRR</b>	Friends of Potomac River Refuges
<b>FONSI</b>	Finding of No Significant Impact
<b>Friends Group</b>	Friends of Potomac River Refuges
<b>FTE</b>	Full-time Equivalency
<b>FWS</b>	United States Fish and Wildlife Service
<b>GIS</b>	Geographic Information System
<b>GPS</b>	Global Positioning System
<b>HMP</b>	Habitat Management Plan
<b>IBA</b>	Important Bird Area
<b>IBP</b>	Institute for Bird Populations
<b>IMP</b>	Inventory and Monitoring Plan
<b>IPM</b>	Integrated Pest Management Plan
<b>LEEDS</b>	Leadership in Energy and Environmental Design
<b>Managers Group</b>	Mason Neck Land Managers Group
<b>MANEM</b>	Mid-Atlantic/New England/Maritime
<b>MAPS</b>	Monitoring Avian Production and Survivorship
<b>MBTA</b>	Migratory Bird Treaty Act
<b>MDNR</b>	Maryland Department of Natural Resources
<b>MOA/MOU</b>	Memorandum of Agreement/Understanding
<b>NABCI</b>	North American Bird Conservation Initiative
<b>NAWCP</b>	North American Waterbird Conservation Plan
<b>NAWMP</b>	North American Waterfowl Management Plan
<b>NEPA</b>	National Environmental Policy Act
<b>NHCR</b>	National State Agency Herpetological Conservation Report
<b>NHPA</b>	National Historic Preservation Act
<b>NMFS</b>	National Marine Fisheries Service
<b>NOA</b>	Notice of Availability
<b>NOI</b>	Notice of Intent
<b>NPS</b>	National Park Service
<b>NRCS</b>	Natural Resources Conservation Service
<b>NRO</b>	Northern Regional Office of the Virginia Department of Environmental Quality
<b>NVRC</b>	Northern Virginia Regional Commission

<b>NVRPA</b>	Northern Virginia Regional Park Authority
<b>NWPS</b>	National Wilderness Preservation System
<b>NWR</b>	National Wildlife Refuge
<b>NWRF</b>	National Wildlife Refuge Fund
<b>NWRS</b>	National Wildlife Refuge System
<b>PARC</b>	Partners in Amphibian and Reptile Conservation
<b>PIF</b>	Partners in Flight
<b>PHNST</b>	Potomac Heritage National Scenic Trail
<b>PRFC</b>	Potomac River Fisheries Commission
<b>RONs</b>	Refuge Operation Needs System
<b>RV</b>	Recreational Vehicle
<b>SAMMS</b>	Service Asset Maintenance Management System
<b>SAV</b>	Submerged Aquatic Vegetation
<b>SEMARNAT</b>	Secretaría de Medio Ambiente y Recursos Naturales (Mexico)
<b>SHPO</b>	State Historic Preservation Office
<b>SLAMM</b>	Sea Level Affecting Marshes Model
<b>SRMA</b>	Special Recreation Management Area
<b>SUP</b>	Special Use Permit
<b>SWG</b>	State Wildlife Grant
<b>SWPD</b>	Fairfax County Stormwater Planning Division
<b>TMDL</b>	Total Maximum Daily Load
<b>USCB</b>	United States Census Bureau
<b>USDA</b>	United States Department of Agriculture
<b>USDA-APHIS</b>	United States Department of Agriculture - Animal and Plant Health Inspection Service
<b>USDA-FS</b>	United States Department of Agriculture Forest Service
<b>USFWS</b>	United States Fish and Wildlife Service
<b>USGS</b>	United States Geological Survey
<b>VCN</b>	Virginia Conservation Network
<b>VDACS</b>	Virginia Department of Agriculture and Consumer Services
<b>VDCR</b>	Virginia Department of Conservation and Recreation

## *Acronyms and Abbreviations*

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<b>VDEQ</b>	Virginia Department of Environmental Quality
<b>VDF</b>	Virginia Department of Forestry
<b>VDGIF</b>	Virginia Department of Game and Inland Fisheries
<b>VDH</b>	Virginia Department of Health
<b>VDHR</b>	Virginia Department of Historic Resources
<b>VDOT</b>	Virginia Department of Transportation
<b>VIMS</b>	Virginia Institute of Marine Science
<b>VMRC</b>	Virginia Marine Resources Commission
<b>VNHP</b>	Virginia Natural Heritage Program
<b>VNPS</b>	Virginia Native Plant Society
<b>VRE</b>	Virginia Railway Express
<b>VSP</b>	Visitor Services Plan
<b>WAP</b>	Virginia Wildlife Action Plan
<b>WMP</b>	Watershed Management Plan